

68277

SOV/81-59-10-36405

Effect of Some Conditions of Catalytic Cracking in a Bubbling Layer of Synthetic Alumina-silicate on the Formation of Aromatic Hydrocarbons in the Composition of Gasoline

of paraffins from 49.2 - 43.9 to 35.2 - 30.4%. Gasolines obtained in the first stage at 480°C after passing through the second stage have a content of olefines of 3.8 - 3.9%, aromatic hydrocarbons 35 - 42.5%, naphthenes 26.0 - 23.2%, paraffins 35.2 - 30.4%. It has been established by the methods of clear-cut rectification of gasoline into narrow fractions, by the determination of their physical-chemical constants and by spectral analysis that the ratios of the individual aromatic hydrocarbons change little with a change in the cracking temperature.

N. Kal'tsev

Card 2/2

ZULFUGARLY, D. and ZIZIN, V.

"Spectral Method of Determining Sodium in Aluminum Silicate Catalysts,"  
Novosti neft, tekhniki, No 2, 1953, pp 9-11

A simple method for detecting 0.1 - 1.0% Na in aluminum silicate catalysts is based on measurement of absolute intensities of lines 3302 and 3303 A of the Na doublet. The amount of Na is found from a graduated curve expressing the relation of optical density of blackening of the photoplate to the logarithm of Na concentration.

R<sup>2</sup>hFiz, No 3, 1955

ZUL'FUGARLY, D.I.; ISMAILOV, I.M.

Analysis of coke elements in a depleted aluminosilicate catalyser.  
Dokl. AN Azerb. SSR 11 no.2:97-102 '55. (MIRA 8:10)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut nefte-  
pererabatyvayushchey promyshlennosti im. V.V.Kuybysheva. Pred-  
stavleno deystvitel'nyy chlenom Akademii nauk Azerbaydzhanskoy  
SSR M.F.Nagiyevym.

(Cracking process)

ZUL'FUGARLY, D. I.

26997

Med' V Burovykh Vodakh Azerbaydzhana I Ee Korrelyatsionnoe Znachenie.  
Doklady (Akad. Nauk Azerbaydzh.Ssr). 1949, No. 7, S. 251-56. - Rezyume Na  
Azerbaydzh. Yazh-Bibliogr: 11 Nazv.

SO: LETOPIS NO. 34

ZUL FUGARLY, D

3

~~A spectral method for determining cobalt in glassy  
 cobalt catalysts D. Z. Fugarly and V. L. Linn  
 J. Appl. Polym. Sci. 1954, 8, 1001-1004  
 A spectral method is described for making  
 a determination of cobalt in glassy catalysts. It  
 involves measurement of the absorption of the 447  
 and 500 Å lines of a 54.4 keV source. The intensity of a line  
 with regard to the ground state and spectrum is compared  
 to its intensity. The unit of 100 is the factor  
 by which the intensity of a line is multiplied to  
 obtain the intensity of a line in a standard  
 solution.~~

2 u L F u G A R L y , D I .

11(4) PHASE I BOOK EXPLANATION 507/2925

Baku. Azerbaydzhanskiy nauchno-issledovatel'skiy institut nefte-  
pererabatyvayushchey promyshlennosti imeni V. V. Maydanova.  
Borzhik tridov, vyp. 2. (Collection of Works, No. 2) Baku,  
Azerbaidzhan, 1958. 373 p. Errata slip inserted. 500  
copies printed.

Additional Sponsoring Agency: Azerbaydzhnan. Ministerstvo neftyanoy  
promyshlennosti.

Ed. of Publishing House: T.B. Aliyev; Editorial Board: V.S. Aliyev,  
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Sciences, A.M. Kulliyev, Doctor of Chemical Sciences, M.M. Indukov,  
Candidate of Technical Sciences, V.Ya. Kharlamov, Candidate of  
Chemical Sciences, P.G. Kulevanova, Candidate of Technical Sciences,  
A.M. Leshina, Candidate of Chemical Sciences, M. Aliyev,  
Candidate of Chemical Sciences, I.M. Omdzhova, Candidate  
of Technical Sciences, M.M. Melik-Zade, Candidate of Chemical  
Sciences.

FOREWORD: This collection of articles is intended for chemical  
engineers, technicians, and refiners concerned with advanced  
methods of petroleum conversion.

COVERAGE: The collection presents an analysis of different  
types of crudes extracted in Azerbaydzhnan and of the products  
recovered from these crudes through petroleum conversion  
processes. The distilling, desalt, and demulsifying of crudes  
is described and the suitability of these crudes for the  
recovery of diesel fuels is discussed. Results of catalytic  
cracking performed over a fluidized bed synthetic catalyst  
and the chemical composition of gasoline produced by the  
state catalytic cracking are analyzed. Attrition and deactiva-  
tion of catalysts, as well as catalyst circulation in a hyper-  
flow system are described. Various lubricant additives and  
the production of different types of oils and of carbon black  
are outlined. Reference is made to individual articles.

Maskeyan, V.Ya., M.E. Maskeyan, K.I. Antikova, Kh.M. Gulamova,  
and A.S. Arustamov. Preliminary Treatment of Baku Crudes for  
Refining 15

Astashev, S.A., V.V. Yermakina, A.G. Zakharenko, A.V. Zakharenko,  
V.A. Zakharenko, and V.A. Zakharenko. The Use of  
Desalters in the Refining of Azerbaydzhnan Crudes as a Raw Material  
Source for Diesel Fuels 34

Maskeyan, V.Ya., V.S. Gulyayev, and D.I. Zakharenko. Effect of  
Catalytic Conditions on the Catalytic Cracking of Baku Crudes over a Fluidized  
Synthetic Silica Alumina Catalyst on the Production of Aromatic  
Hydrocarbons in Gasoline 44

Card 36

Maskeyan, V.Ya., V.S. Gulyayev, and D.I. Zakharenko. Chemical Composi-  
tion of Gasoline Produced by Two-Stage Catalytic Cracking 70

ZUL'FUGARLY, D.I.

Trace elements in crude oils of Azerbaijan. Uch. zap. AGU. Fiz.-  
mat. i khim. ser. no.3:91-97 '59. (MIRA 14:3)  
(Petroleum--Analysis)

ZUL'FUGARLY, D.I.; UMAKHANOVA, N.S.

Studying the distribution of trace elements in the oils of  
Daghestan. Trudy Geol.inst.Dag.fil. AN SSSR 2:128-136 '60.  
(MIRA 15:12)  
(Daghestan—Petroleum—Analysis) (Trace elements)



ZULFUGARLY, D.I.; UMAKHANOVA, N.S.

Copper in the Daghestan oils. Azerb khim.zhur. no.6:99-104  
:59.

(MIRA 14:9)

(Daghestan--Petroleum--Analysis)  
(Copper--Analysis)

ZUL'FUGARLY, D.I.

Problem of the origin of petroleum in H.D.Zul'fugarly's works.  
Azərbaycan, no.4:3-8 '61. (MIRA 14:11)  
(Petroleum)

SEIDOV, A.G.; ZUL'FUGARLY, D.I.

Petrographic and mineralogical nature and the trace element content  
in clays of the Maikop series in Azerbaijan. Uch.zap.AGU.Geol.--  
geog.ser. no.5:67-72 '59. (MIRA 14:6)  
(Azerbaijan--Clay)

ZUL'FUGARLY, D.I.

Manganese content of formation waters and sedimentary rocks  
in oil fields of Azerbaijan. Azerb.khim.zhur, no.4:113-120  
'60. (MIRA 14:8)

(Manganese--Analysis) (Azerbaijan--Geochemistry)

ZUL'FUGARLY, D.I.

Types of compounds formed by microelements in petroleum.

Azert. khim.zhur. no.4:109-118 '59.

(Petroleum--Analysis)

(MIRA 14:9)

ZUL'FUGARLY, D.I.; UMAKHANOVA, N.S.

Abundance of manganese and cobalt in Daghestan oils. Azerb.khim.-  
zhur. no.1:65-72 '60. (MIRA 14:9)  
(Daghestan--Petroleum--Analysis) (Manganese--Analysis)  
(Cobalt--Analysis)

ZUL'FUGARLY, D.I.

Lomonosov, the founder of chemistry in Russia; on the 250th anniversary of his birth. Azerb.khim.zhur. no.6:7-13 '61.

(MIRA 15:5)

(Lomonosov, Mikhail Vasil'evich, 1711-1765)

ZUL'FUGARLY, D.I.; ASHUMOV, G.G.; MUSAYEV, M.R.; NASIROV, A.B.

Macroelements in petroleum ashes of Azerbaijan [in Azerbaijani  
with summary in Russian]. Azerb.khim.zhur. no.2:149-152 '60.  
(MIRA 14:8)

(Azerbaijan--Petroleum--Analysis)



ZUL'FUGARLY, D.I.; UMAKHANOVA, N.S.

Elements of the iron family in sedimentary rocks of Daghestan.

Azerb.khim.zhur. no.5:93-97 '60.

(Daghestan--Rocks, Sedimentary)

(MIRA 14:8)

ZUL'FUGARLY, D.I.

Chromium content of Azerbaijan crude oils. Azerb.khim.zhur.  
no.6:127-132 '60. (MIRA 14:8)  
(Azerbaijan—Petroleum—Analysis) (Chromium—Analysis)

MAMEDALIYEV, Yusuf Geydarovich, Laureat Gosudarstvennoy premii, nagrazhden ordenom Lenina, chlen-korrespondent AN SSSR, (1905-1961); NAGIYEV, M.F., akademik, red.; KULIYEV, A.M., akademik, red.; ZUL'FUGARLY, D.I., prof., red.

[Selected works in three volumes] Izbrannye proizvedeniya v trekh tomakh. Baku, Izd-vo AN Azerb.SSR. Vol.1. 1964. 578 p. (MIRA 17:10)

EFENDIYEV, G.Kh.; ALEKPEROV, R.A.; NURIYEV, A.N.; ZUL'FUGARLY,  
D.I., prof., red.

[Problems of the geochemistry of radioactive elements in  
oil fields] Voprosy geokhimii radioaktivnykh elementov  
neftiannykh mestorozhdenii. Baku, Izd-vo AN Azerb.SSR,  
1964. 149 p.  
(MIRA 17:8)

EFENDIYEV, G.Kh.; ALEKPEROV, R.A.; NURIYEV, A.N.; ZUL'FUGARLY,  
D.I., prof., red.

[Problems in the geochemistry of radioactive elements in  
oil fields] Voprosy geokhimii radioaktivnykh elementov  
neftiarykh mestorozhdenii. Baku, Izd-vo AN Azerb.SSR, 1964.  
149 p.  
(MIRA 17:7)

ZUL'FUGARLY, D.I.; ABDULLAYEVA, M.I.; AGAYEV, A.I.

Hydrochemical investigation of waters of the Koshkarchay River.  
Azerb.khim.zhur. no.2:69-74 '61. (MIRA 14:8)  
(Koshkarchay River—Water—Composition)

NASIROV, A.B.; GUTYRYA, V.S.; ZUL'FUGARLY, D.I.

Hexamethylenes in gasoline from two-stage catalytic cracking.  
Sbor.trud.AzNII NP no.2:70-76 Ag '58. (MIRA 12:6)  
(Cyclohexane) (Gasoline--analysis)  
(Cracking process)

HASIROV, A.B.; GUTYRYA, V.S.; ZUL'FUGARLY, D.I.

Chemical composition of gasoline from two-stage catalytic  
cracking. Sbor.trud.AkNII NP no.2:56-69 Ag '58.

(Cracking process) (Gasoline--Analysis) (KIRA 12:6)



NASIROV, A.B.; GUTYHYA, V.S.; ZUL'FICARLY, D.I.

Effect of certain variables of catalytic cracking in a fluidized  
bed of artificial aluminum silicates on the formation of aromatic  
hydrocarbons in gasoline. Sbor.trud. ANII NP no.2:44-55  
Ag '58. (MIRA 12:6)

(Cracking process) (Gasoline—Analysis)  
(Aromatic compounds)

ZUL'FUGARLY, D.I., UMAXHANOVA, N.S.

Vanadium and nickel in Cretaceous crudes in Daghestan. Dokl. AN  
Azerb. SSR 16 no. 5: 461-466 '60. (MIRA 13:8)

1. Azgosuniversitet im. S.M. Kirova. Predstavleno akad. AN  
Azer SSR M.A. Kashkayem.  
(Daghestan--Petroleum) (Vanadium) (Nickel)

ZUL'FUGAROV, Z.G.; PARFENOVA, T.S.; DZHAFARLI, R.M.; RUSETSKAYA, Ye.A.;  
POGOSOV, A.G.

Wine clarification with bentonite gilyabi clays from Shemakha  
and Geokmaly deposits in Azerbaijan, Trudy Inst. khim. AN Azerb.  
SSR 16:27-39 '57. (MIRA 12:9)  
(Azerbaijan--Bentonite) (Wine and wine making)

ZUL'FUGARLY, D.I.

Metalloporphyrin complexes discovered in petroleum. Azerb.khim.  
zhur. no.3:89-100 '59. (MIRA 14:9)  
(Porphyrins)

ZUL'FUGARLY, D.I.

Vanadium content of oils of Azerbaijan. Azerb.khim.zhur.  
no.3:139-146 '60. (MIRA 14:8)  
(Azerbaijan--Petroleum--Analysis) (Vanadium--Analysis)

SOV/81-59-8-28958

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 8, p 503 (USSR)

AUTHORS: Nasirov, A.B., Gutyrya, V.S., Zul'fugarly, D.I.

TITLE: Hexamethylenes of Gasoline of Two-Stage Catalytic Cracking

PERIODICAL: Sb. tr. Azerb. n.-1. in-t neftpererabat. prom-stl, 1958, Nr 2, pp 70 - 76  
(Azerb. summary)

ABSTRACT: The characteristic is cited of naphthene-paraffin residues remaining after chromatographic extraction of aromatic hydrocarbons from gasolines which are products of the two-stage catalytic cracking of the gas-oil fractions of Balakhany heavy and Surakhany choice petroleum. Independently of the nature of the initial raw material, a temperature increase in the first stage leads to a decrease in the content of methylcyclohexane and 1,3- and 1,4-dimethylcyclohexanes and consequently of the total content of hexamethylenes in the product.

N. Kel'tsev

Card 1/1

ZUL'FUGAR *ay*, D.I.

УВЕДОМЛЕНИЕ РЕДАКЦИИ АЗЕРБАЙДЖАНСКОГО  
УЧЕНОГО ЖУРНАЛА

VIII Mendeleev Congress for General and Applied Chemistry in  
Section of Chemistry and Chemical Technology of Fuels,  
publ. by Acad. Sci. USSR, Moscow 1979

abstracts of reports scheduled to be presented at above mentioned congress,  
Moscow, 15 March 1979.

ZUL'FUGARLY, D.I.; MADATOV, M.N.

Occurrence of manganese and vanadium in some Azerbaijanian soils. Uch.  
zap.AGU no.3:75-81 ' 58. (MIRA 12:1)  
(Azerbaijan--Soils--Analysis) (Manganese) (Vanadium)



ZUL'FUGARLY, D.I.; NASIROV, A.B.

Transformation of petroleum hydrocarbons. Uch. zap. AGU. Ser.  
fiz.-mat. i khim. nauk no.5:103-111 '61. (MIRA 16:6)  
(Petroleum products)

ZUL'FUGARLY, D.I.; ABDULLAYEVA, M.I.; ABDULLAYEV, A.I.

Occurrence of cobalt in Azerbaijan soils. Uch. zap. AGU. Fiz.-  
mat. i khim. ser. no.4:69-72 '59. (MIRA 16:6)

(Azerbaijan--Cobalt)

24005

ZUL'FUGARLY, D. I. Omikroelementakh surakhanskikh neftey. Doklady (Akad. nauk Azerbaydzh. SSR), 1949, No. 6, S. 205-12. - Rezюме na azerbaydzh. Yaz. - Bibliogr: 11 Nazv.

SO: Istopis, No. 32, 1949.

ZUL'FUGARLY, D. I.

26997. ZUL'FUGARLY, D. I.--Med' v Burovykh vodakh azerbaydzhana I ee korre layats ionnoye snach ye niye. Doklady (Akad. Nauk Azerbaydzh. SSR), 1949, No. 7, S. 251-56,--REZYUME NA azerbayosh, Yaz.-- Bibliogr: 11 Naev.

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949

GUSEYNOV, S.D.; ZUL'FUGARLY, D.I.; ABDULIAYEVA, M.I.

Extraction of iodine from apsheron brines by means of air desorption. Report no.1: Desorption of iodine in an acidic medium [in Azerbaijani with summary in Russian]. Uch.zap.AGU no.3:17-25 '55.  
(Apsheron Peninsula--Iodine) (Desorption) (MLRA 9:12)

ZUL'FUGARIY, D.I.; GULYAYEVA, L.A., red.; VISHNEVITSKAYA, I.A.,  
red.izd-va; AKIMEDOV, S., tekhn. red.

[Distribution of minor elements in caustobioliths, organisms,  
sedimentary rocks, and formation waters] Rasprostraneniye mikro-  
elementov v kaustobiolitakh, organizmakh, osadochnykh porodakh  
i plastovykh vodakh. Baku, Izd-vo Azerbaidzhan'skogo univ.,  
1960. 229 p. (MIRA 15:4)

(Trace elements)

ZUL'FUGARLY, D.I.; MADATOV, M.N.

Distribution of some trace elements in soils of Lashin and  
Dashkestan districts. Azerb. khim.zhur. no. 3:113-121 '61.  
(MIRA 14:11)

(Lashin District--Soils--Analysis)  
(Dashkestan District--Soils--Analysis)

ZUL'FUGARLY, D.I.

Distribution of trace elements in oil field formation  
waters. Trudy Inst.khim.AN Azerb.SSR 19:107-116 '61.  
(MIRA 14:10)

(Oil field brines)  
(Trace elements)



ZUL'FUGARLY, N.D.

Distribution and forms of germanium occurrence in enargite-  
containing pyrite deposits. Azerb. khim.zhur. no.4:115-120  
'64.

(MIRA 18:3)

SHUMGAPLY, H.D.; EFFENDIYEV, G.Kh.; KISLYAKOVA, I.Ya.; ADAYEVA, F.I.

Selenium and tellurium in pyrites. Azerb. Khim. zhur. no.2:  
95-99. '65.

(MIRA 18:12)

1. Institut khimii AN AzerSSR. Submitted Jan. 15, 1965.

ZUL'FUGARLY, N.D.; GEYDAROV, A.S.; NURIYEV, A.N.

Radioactive elements in argillaceous rocks of the Sarmat deposits.  
Azerb.khim.zhur. no.2:119-122 '62. (MIRA 16:3)  
(Nakhichevan A.S.S.R.—Clay) (Radioactive substances)

ZUL'FUGARLY, N.D.

Scientific Conference of the Chemical Institute of the  
Academy of Sciences of Azerbaijan. Azerb. khim. zhur. no. 4:119  
'59. (MIRA 14:9)

(Petroleum--Congresses)

(Chemistry, Technical)

ZUL'FUGAROV, T.Kh.

Annual variations of the surface temperature of waters in the  
western part of the Middle Caspian. Izv. AN Azerb. SSR. Ser. geol.-  
geog. nauk no. 1: 118-123 '65. (MIRA 18:8)

KULIYEV, A.M.; ZUL'FUGAROVA, A.G.

Synthesis and study of alkyl m-dioxanes. Dokl. AN Azerb. SSR 20  
no.4:29-31 '64. (MIRA 17:7)

1. Institut neftekhimicheskikh protsessov-AN Azerbaydzhanskoy SSR.

L 1792-66 ENT(m)/ENP(w)/EPF(c)/T/ENP(t)/ENP(b) JD/IB/DJ/IB  
 ACCESSION NR: AP5024480 IR/0315/65/000/003/0026/0032

AUTHOR: Kuliyeu, A. M.; Zul'fugarova, A. G.; El'ovich, I. I.

TITLE: Synthesis and study of the anti-wear properties of additives from condensation products of alkylphenols with chloral

SOURCE: Azerbaydzanskiy khimicheskiy zhurnal, no. 3, 1965, 26-32

TOPIC TAGS: lubricant additive, antiwear additive, anticorrosion additive

ABSTRACT: Seven anti-corrosion and anti-wear additives have been prepared by the condensation of various alkylphenols with chloral and, in some cases, subsequent treatment with phosphorus pentasulfide. The phenols used were isopropyl-, p-tert-butyl-, and p-tert-pentylphenols, and a technical alkylphenol. Condensation with chloral was carried out with stoichiometric amounts of the reactants in isooctane solution at 80-85C in the presence of concd H<sub>2</sub>SO<sub>4</sub>. The condensation products were treated with P<sub>2</sub>S<sub>5</sub> in deaeromatized ligroin at 95-100C:

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L 1792-66

ACCESSION NR: AP5024480

For both reactions yields ranged from 66 to 96%; product melting points from 42 to 162C. The products were tested as anti-wear and anti-corrosion additives (3%) in AK-5 oil. Wear tests employed a four-ball apparatus, and anti-corrosion tests involved the [Soviet] NAMI method and a Swiss method (Reference given). All the products showed good anti-corrosion and anti-wear properties. The condensation products increased the anti-wear factor from 23 to 56.2 max and the dithiophosphates increased it from 23 to 102.5 max. Corrosion of lead strips (NAMI method) was fully prevented. Orig. art. has: 2 formulas and 4 tables. (SM)

ASSOCIATION: INKhP AN Azerb SSR 44.55

SUBMITTED: 21Jan65

ENCL: 00

SUB CODE: FP, OP

NO REF BOV: 003

OTHER: 001

ATD PRICE: 4112

Card 2/2



L 1631-66 EWT(m)/EPT(c)/ENP(j)/T BW/WI/DJ/RM

ACCESSION NR: AP5022083

UR/0249/65/021/005/0020/0024

AUTHORS: Kuliyeu, A. M.<sup>44</sup>; Zul'fugarova, A. G.<sup>44</sup>; El'ovich, I. I.<sup>44</sup>

TITLE: Synthesis and investigation of antiwear additives from the products of alkylbenzenes-chloral condensation

SOURCE: AN AzerbSSR. Doklady, v. 21, no. 5, 1965, 20-24

TOPIC TAGS: alkyl benzene, antiwear additive, condensation reaction

ABSTRACT: Ten new compounds, synthesized by acid condensation of chloral with various alkylbenzenes, were tested for their antiwear and anticorrosive properties as lubricant additives. The work was undertaken in view of the observations of P. I. Sanin and Ye. S. Shepeleva (Prisadki k maslam i toplivam. Gostoptekhnizdat, 1961, p. 61) that the antiwearing properties of many other organic compounds can be related to their content of  $\text{CCl}_3$  group. The reaction was performed at 50-60C for 5-6 hours in the presence of concentrated  $\text{H}_2\text{SO}_4$  (40% by weight of alkylbenzene). The white crystalline products were recrystallized from heptane. Physical properties, yields, and elementary analyses of the following compounds are presented:

Card 1/2 1,1,1-Trichloro-2,2'-bis-diphenylethane;  
1,1,1-Trichloro-2,2'-bis-(1-methylphenyl)ethane;

L 1631-66

ACCESSION NR: AP5022083

1,1,1-Trichloro-2,2'-bis-(1,2-dimethylphenyl)ethane;  
 1,1,1-Trichloro-2,2'-bis-(1,3-dimethylphenyl)ethane;  
 1,1,1-Trichloro-2,2'-bis-(1,4-dimethylphenyl)ethane;  
 1,1,1-Trichloro-2,2'-bis-(1-ethylphenyl)ethane;  
 1,1,1-Trichloro-2,2'-bis-(1-isopropylphenyl)ethane;  
 1,1,1-Trichloro-2,2'-bis-(1-tert.butylphenyl)ethane;  
 1,1,1-Trichloro-2,2'-bis-(1-sec.amylphenyl)ethane;  
 Condensation product of polyalkylbenzene with chloral.

The anti-wear properties of the compounds did not differ from each other to any extent but an addition of 3% of either of them to the lubricant MK-22 increased its general wear index 3 to 3.5 times. A Swiss test of the anticorrosive properties indicated that an addition of 3% of either compound to the lubricant AK-15 contains corrosion of steel plates within normal limits. Orig. art. has: 4 tables and 1 equation.

ASSOCIATION: NIKhF 44

SUBMITTED: 30Jun64

NO REF SOV: 004

ENCL: 00

OTHER: 001

SUB CODE: 00

Card 2/2

NOVAKOV, A.M.; ZUL'FUGAROVA, A.G.

Synthesis of aliphatic alkyl-m-dioxanes. Azerb.khim.shur. no.3:19-  
23 '60.

(Dioxane)

(MIRA 14:8)

ZUL'FUGAROV, G. A., Doc Med Sci -- "On the <sup>vesical</sup> ~~extra-vesical~~ <sup>and</sup> pros-  
tatectomy. (Experimental <sup>and</sup> clinical study)." Tbilisi, 1960,  
(Tbilisi State Med Inst) (KL, 8-61, 257)

- 411 -

ZUL'FUGAROV, G.A., Dr Med Sci -- (DISS) "Concerning extra  
vesical prostatectomy," Baku, 1960, 42 pp (Tbilisi State Medical  
Institute) (KL, 34-60, 124)

ZULFUGAROV, G. A.

Dissertation: "Experimental Clinical Data on the Effect of Heparin on Thrombi."  
Cand Med Sci, Azerbaydzhani State Medical Institute, Baku, 1954. (Referativnyi Zhurnal-  
Khimiya, No. 11, Moscow, Jun 54)

SO: SUM 318, 23 Dec 1954

ZUL'FUGAROV, M. A.

ZUL'FUGAROV, M. A.: "Methodology of teaching the geography of Azerbaydzhan SSR (in the seventh class)". Baku, 1955. Azerbaydzhan State Pedagogical Inst imeni V. I. Lenin.  
(Dissertations for the degree of Candidate of Pedagogical Sciences.)

SO: Knizhnava Letopis' No. 50. 10 December 1955. Moscow.

USSR / Farm Animals, Hogs

Q-4

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7199

Author : S. Zul'fugarov

Inst : Not given

Title : An Experiment in the Fattening of Hogs on the  
Bakinskiy Meat Plant.

Orig Pub: Sots. s.kh. Azerbaydzhana, 1957, No 2, 34-37.

Abstract: A comparison of the results of fattening local  
unimproved hogs (from a weight of 67-70 kilograms  
to a weight of 101-111 kilograms in 85 to 123  
days), hybrids (from 70 kilograms to 142 kilograms  
in 110 days), and white Ukrainian Steppe hogs  
(from 51 kilograms to 158 kilograms in 147 days),  
determined that local hogs bring the poorest  
results as to gain in weight and compensation  
for expenditure of feed.

Card 1/1



ZUL'FUGAROV, S.A., Cand Agr Sci -- (diss) <sup>fat</sup> "Meat ~~and-bellows~~  
productivity of <sup>fat</sup> ~~large~~ pigs of the Ukrainian steppes of the  
white, local (Azerbaydzhan) <sup>fat</sup> ~~breed~~ and their hybrids fed <sup>fat</sup> ~~with~~  
industrial waste ~~products~~ from the city of Baku." /Baku/, 1958  
27 pp. 1 sheet of tables (Min of Agr USSR. Azerbaydzhan Agr  
Inst) 150 copies (KL, 23-58, 109)

ZUL'FUGAROV, Z.G.; ALIYEV, A.S.

X-ray diffraction and electron diffraction study of gilyabi from  
various deposits of Azerbaijan. Azerb. khim.zhur. no.4:103-109  
'64. (MIRA 18:3)

28108

Vzaimodeystvii gumbrina I syernistykh soyedinyeniy pri kontaktirovani. Trudy In-ta khimii (Akad nauk azyerbaydzh, SSR), T. VII, 1949, S. 69-74. - Ryetymye na azyerbaydzh. Yaz. - Bibliogr: 10 Nazv.

SO: LETOPIS No. 34

ZULFUGAROV, Z.

28242

Isslyedovaniye fiziko-khimichyeskikh yavlyeniya v protsessakh otbyelvaniya  
glinoy. Soobshch. 4. Trudy. In-ta khimii (akad. nauk. Azerbaidzh. SSR),  
T. VII, 1949, s. 75-83 - Ryezumye na azyerbaidzh. yaz. - Bibliogr: 16 nazv

SO. LETOPIS NO. 34

28410

Issledovaniye ryegyenveratsii otrabotannogo gumbrina. Trudy In-ta khimii (Akad. Nauk  
azyerbaydzh. SSR), T.VII, 1949, S. 84-90 - Ryezumye na azyerbaydzh. Yaz. - bibliogr:  
9 Nazv

m. Tsyellyuloznaya promyshlyennostb. Bumashnaya promyshlyennostb. 1

SO: LETOPIS No. 34

28409

O byestvii alyumosil ikatnykh i khromonyumosilikatnykh katalizatorov na tsiklopentadieno-g/eksilyenovuyu fraktsiyu byenzolnoy golovki. Trudy in-ta khimii (Akad. Nauk Azerbaydzh. SSR), T. VII, 1949 S. 130-36-Bibliogr: 16 Nazv

SC: LETOPIS No. 34

ZUL'FUGAROV, Z. G.

32370

ZUL'FUGAROV, Z. G. Adsorbtsionnaya Sposobnost' Bentonitov i Vulkanicheskikh Pevloy  
Nevotopykh Mestorozhdeniy Azerbaydzhana. Izvestiya Akad. Nauk Azerbaydzh. SSR, 1949 .  
NO. 9, s. 18-20--Resyume NA Azerbaydzh. Yaz--Bibliogr: 8 Nazv.

SO: Letopis' Zhurnal'nykh Stator, Vol. 44

CA

Contact bleaching with gumbrin. *Z. G. Zolotarev*,  
*Zh. Prikl. Khim.* (J. Applied Chem.) **22**, 104,  
 (1949). In contrast to natural American gumbrin,  
 gumbrin is sensitive to the temp., the pH of its aq. sol.  
 falling somewhat on heating. This change det. a change  
 of the activity in the purification of petroleum products.  
 On heating gumbrin with acidified bright stock, both  $\text{SO}_2$   
 and  $\text{H}_2\text{S}$  are evolved, depending on the length of the heat  
 ing; without gumbrin, only  $\text{SO}_2$  is evolved. On regenera-  
 tion, gumbrin evolves considerable amts. of  $\text{H}_2\text{S}$ . The  
 decrease of the bleaching ability of gumbrin after regenera-  
 tion is due partly to the formation of sulfides. N. Thom



CA

Transformation of the vapor of the amylene-benzene fraction of the overhead benzene product by the action of natural Azerbaijan aluminosilicates (clay and clays). *Zh. Prikl. Khim.* 23, 767-74; *J. Applied Chem. U.S.S.R.* 23, 811-18 (1951) (Engl. translation).—Vapors of an unsatd. C<sub>7</sub>-C<sub>8</sub> hydrocarbon fraction of benzene light oil are absorbed in varying amounts by samples of volcanic ash and natural or activated bentonites suspended in a container above the liquid. Activated Khanlar bentonite absorbs as much as 6.08 g. of hydrocarbons per g. of the clay in 21 days to form a colored liquid condensate having a higher d. and  $\eta$  and a much lower i. no. Polymerization takes place during the adsorption process. The fraction was subjected to catalytic treatment with Khanlar bentonite at 250° at a flow rate of 0.25 vol. per vol. of catalyst per hr. The results indicate 83.5% conversion of the mono- and diolefins chiefly into paraffins and yellow satd. hydrocarbons exhibiting appreciable fluorescence. B. C. Metzner

TEVOSOV, S.P.; ZUL'FUTAROV, Z.G.; DANILOVA, N.A.; EFENDIYEV, G., redaktor

[Description of iodine from coal by electrochemical methods]  
Elektrokhimicheskiy metod desorbtsii ioda s uгля. Baku, Izd-vo  
Akad. nauk Azerbaidzhanskoi SSR, 1951. 54 p. (MLRA 7:11)  
(Iodine) (Electrochemistry, Industrial)

USSR/Chemical Technology. Chemical Products and Their Application -- Treatment of natural gases and petroleum. Motor fuels. Lubricants, I-13

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5511

Author: Zul'fugarov, Z. G.

Institution: Academy of Sciences Azerbaydzhan SSR

Title: Catalytic Cracking of Naphthenic Acids and Gas Oil Over Oxide Catalysts

Original

Publication: Izv. AN AzSSR, 1953, No 5, 37-50

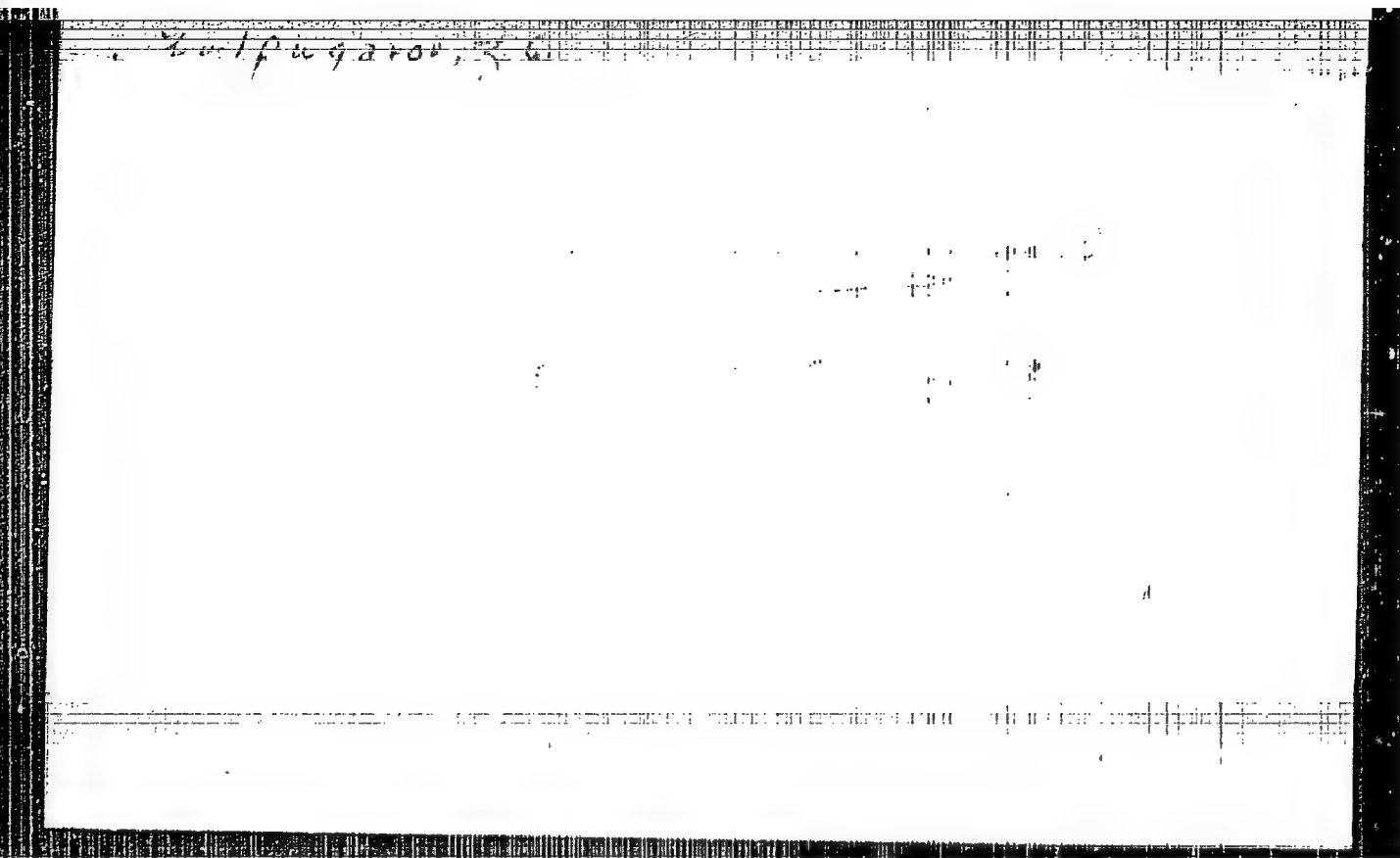
Abstract: No abstract

Card 1/1



"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065620002-8



APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065620002-8"

ZyL' FUGAROV, Z.G.; TOPCHIYEVA, K.V.

Catalytic activity and structural characteristics of magnesium  
aluminum silicate catalysts. [with English summary in insert].  
Zhur.fiz.khim. 30 no.9:2011-2015 S '56. (MIRA 9:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova,  
Akademiya nauk Azerbaydzhanskoy SSR, Institut khimii, Baku.  
(Catalysts, Aluminum silicate)

ZUL'FUGAROV, Z. G. Doc Chem Sci -- (diss) "Study of physical  
and chemical properties of natural and synthetic metallosilicate  
contacts, used in <sup>the</sup> refining and cracking of <sup>petroleum</sup> ~~oil~~ products."  
Baku, 1957. 47 pp with graphs 20 cm. (~~Petroleum Inst~~ <sup>Petroleum Inst</sup>),  
~~Petroleum Inst~~, 100 copies  
(KL, 21-57, 99)

ZULFUGAROV, Z.G.; GUTYRYA, V.S., red.; MIKSIADZE, G., red. izd-va; POGOSOV, V.,  
tekh. red.

[Effect of synthesis of catalysts in cracking and their physico-  
chemical properties] Vliianie uslovii sinteza krekiruiushchikh  
katalizatorov na ikh fiziko-khimicheskie svoistva. Baku, Izd-vo  
Akad. nauk Azerbaidzhanskoi SSR, 1957. 221 p. (MKRA 11:2)  
(Catalysts) (Cracking process)



ZUL'FUGAROV, Z.G.; GUTYRYA, V.S., professor, redaktor; PEVZNER, M.I.,  
tekhnicheskii redaktor

[Studies on the physical and chemical characteristics and refining  
properties of Azerbaijan clays and gumbrin] Issledovanie fiziko-  
khimicheskikh svoistv i otbelivaiushchei sposobnosti glin mesto-  
rozhdenii Azerbaidzhanskoi SSR i gumbrina. Baku, Izd-vo Akad.  
nauk Azerbaidzhanskoi SSR, 1957. 247 p. (MLRA 10:8)

1. Chlen-korrespondent Akademii nauk SSSR (for Gutyrya)  
(Azerbaijan--Clay)

ZUL'FUGAROV, Z.G.; BALLOD, A.P.

Relation between the bleaching capacity and the structure of  
natural and activated clays. Azerb.neft.khoz. 36 no.1:34-36  
Ja '57. (MLRA 10:5)

(Clay)

VARLASHOV, B.P.; ZUL'FUGAROV, Z.G.

Effect of the origin of water glass on production methods for aluminosilicate catalysts. Azerb. neft. khim. 36 no. 5:31-34 My '57.  
(Aluminum silicates) (Soluble glass) (MIRA 10:11)

RASULOVA, S.M.; KHALILOVA, N.G.; DZHAFARLI, R.M.; MURANOVA, S.A.; ZUL'FUGAROV, Z.G.

Investigation of means of increasing stable activity of the cracking catalyst "khanlarit" [in Azerbaijani with summary in Russian]. Izv. AN Azerb. SSR. Ser. fiz.-tekhn. i khim. nauk no.5:81-95 '58. (MIRA 12:1)  
(Cracking process) (Catalysts)

TEVOSOV, S.P.; ZUL'FUGAROV, Z.G., doktor khim.nauk, red.; MIKELADZE, G.,  
red.izd-va; AGAYEVA, Sh., tekhn.red.

[Study of electrochemical methods for obtaining iodine from  
oil field waters] Issledovanie elektrokhimicheskikh metodov  
polucheniia ioda iz neftiannykh vod. Baku, Izd-vo Akad.nauk  
Azerbaidzhanskoi SSR, 1959. 188 p. (MIRA 12:12)  
(Iodine) (Oil field brines)

ZUL'FUGAROV, Z.G.; MURADOVA, S.A.; GUSEYNOVA, Z.A.

Manufacture of vitreous magnesium silicate catalysts for the  
cracking of heavy petroleum fractions [in Azerbaijani with summary  
in Russian]. Izv. AN Azerb. SSR. Ser. fiz.-tekhn. i khim. nauk no.1:  
113-124 '59. (MIRA 12:6)

(Cracking process) (Magnesium silicates) (Catalysts)

AGDAMSKIY, T.A.; AGAYEVA, S.G.; ZUL'FUGAROV, Z.G.

Promoting capacity of the oxides of Sr, Lu, Mo, Ce, Cs, Gd added to the catalyst of dehydrogenation of n-butane to butylenes. Dokl. AN Azerb. SSR 20 no.7:21-24 '64.

(MIRA 17:11)

1. Institut khimii AN AzerSSR. Predstavleno akademikom AN AzerSSR. M.A. Dalinym.

ALEKPEROVA, S.A.; ZUL'FUGAROV, Z.G.; AKHUNDOVA, T.S.; DZHANAROVA, R.D.

Effect of the discharge of activating acid on the activity of  
gilyabi of Bayram-Ali and Kobystan deposits, Azerb. khim. zh'r.  
no.3:96-100 '65. (MIRA 19:1)

1. Azerbaydzhanskiy gosudarstvennyy universitet imeni S.M. Kirova.



L 29530-66 EWP(j)/EWT(m)/T IJP(c) RM

ACC NR: AR6004374

SOURCE CODE: UR/0081/65/000/015/S027/S027

AUTHOR: Zul'fugarov, Z. G.; Zul'fugarova, L. Sh.; Muradova, S. A.; 42  
Alimardanov, G. I. B

TITLE: Effect of the chemical composition of the carrier and promoter  
on the catalytic activity and form of chromium in polymerization 1

SOURCE: Ref. zh. Khimiya, Abs. 15S160

REF SOURCE: Sb. Nauchn. osnovy podbora i proiz-va katalizatorov.  
Novosibirsk, Sib. otd. AN SSSR, 1964, 288-295

TOPIC TAGS: ~~polymer~~, polymerization catalyst, chromium oxide, nickel,  
cobalt, iron, ~~CHROMIUM~~, ~~CHEMICAL COMPOSITION~~

ABSTRACT: The effect of the chemical composition of the carrier,  
the amount of  $\text{Cr}^{+3}$  in hydrogel,  $\text{CrO}_4^{2-}$ ,  $\text{K}_2\text{CrO}_4$ , Ni, Co and Fe on the  
activity and form of chromium oxides as a compound in chromalumosili-  
cate, chromalumomagnesiumsilicate and a chromomagnesiumsilicate  
catalyst, were studied and the relationship between the factors deter-  
mined. The synthesis of the carriers was carried out by coprecipitation  
or substitution, and the synthesis of catalysts, by the method of

Card 1/2

L 29530-66

ACC NR: AR6004374

depositing chromium hydroxide on the carrier and by enriching the chromium-containing carrier with chromium anhydride. The activation of the catalyst was performed by oxidizing it by air for 5 hours at 480-510° with a speed of air flow equal to 400 volume units of air for one volume of catalyst per hour. The yield of polyethylene per 1kg of the catalyst obtained in one working cycle was used as a criterion of catalyst efficiency. V. Agasandyan.

SUB CODE: 07/ SUBM DATE: none

Card 2/2

JS

L 32964-66 EWT(m)/EWP(j)/T IJP(c) RM/WW

ACC NR: AP6017331

(A)

SOURCE CODE: UR/0249/65/021/010/0019/0022

AUTHOR: Zul'fugarov, Z. G.; Bulatnikova, E. L.

ORG: Institute of Chemistry, VNIIOlefin (Institut khimii VNIIOlefin)

TITLE: Low-temperature copolymerization<sup>1</sup> of ethylene<sup>1</sup> with propylene<sup>1</sup> and alpha-butylene using a chromium-chromic oxide catalyst<sup>1</sup>

SOURCE: AN AzerbSSR. Doklady, v. 21, no. 10, 1965, 19-22

TOPIC TAGS: ethylene, propylene, copolymerization, polymerizaion catalyst, poly-ethylene plastic

ABSTRACT: The authors study the effect of adding propylene and alpha-butylene during polymerizaion of pure ethylene at low temperatures where the resultant product is a copolymer of extremely high molecular weight. For this purpose, ethylene was copolymerized with propylene and alpha-butylene at low temperatures. The catalyst was made up of chromium oxides on an aluminosilicate carrier. The solvent was "Ekstra" gasoline. The polymerization was done at a temperature of 75-80°C and a pressure of 35 atm. It is found that copolymerization of ethylene with lower olefins at low temperatures on a chromic oxide catalyst may be used to reduce the molecular weight of polyethylene while simultaneously reducing its crystallinity and increasing its elasticity.<sup>1</sup> It was found that the catalyst has a clearly marked induction period of up

Card 1/2

L 32964-66

ACC NR: AP6017331

to one hour which is reduced when the catalyst concentration, temperature and pressure of the process are increased. Orig. art. has: 3 figures, 1 table.

SUB CODE: 11, 07/ SUBM DATE: 21May64/ ORIG REF: 002/ OTH REF: 002

Card 2/2

ZUL'FUGAROV, Z.G.; ALIMARDANOV, G.I.; AGDAMSKIY, T.A.

Catalytic decomposition of normal heptane in the presence of  
gilyabi. Azerb.khim.zhur. no.3:37-48 '59. (MIRA 1: 9)  
(Heptane) (Bentonite) (Azerbaijan)

ZUL'FUGAROV, Z.G.; BASULOVA, S.M.; ALIYEV, A.

Investigating the relationship between the chemical composition, the thermogram, and the structure of gilyabi having cracking and bleaching properties. Azerb.khim.shur. no.2:61-75 '59. (MIRA 13:6)  
(Azerbaijan--Bentonite)

S/081/60/000/017/005/016  
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 17, p. 63, # 68689

AUTHORS: Smirnova, V.Ye., Topchiyeva, K.V., Zul'fugarov, Z.I.

TITLE: The Effect of the Chemical Composition, pH of the Synthesis Medium and the Nature of Initial Sols on the Activity of Alumo-Silicate Catalysts 9

PERIODICAL: Azerb. khim. zh. 1959, No. 1, pp. 83-95 (Azerb. summary)

TEXT: The authors investigated the effect of pH the nature of initial solutions and the chemical composition on the activity and pore structure of alumosilicate catalysts, prepared by coprecipitation of water glass solutions and sodium aluminates (series I) or aluminum sulfates (series II). It was found that the nature of initial salts manifests itself only in the 6.8-10.8 pH range; at lower pH values the catalyst activity of series I does not change and that of series II decreases. At an equal chemical composition and pH of the sol, the catalysts of series II show a relatively higher pore diameter (d). An increased  $Al_2O_3$  percentage in the catalysts of series I causes an increase of d and a decrease in the initial activity, but promotes a higher stability in respect to

Card 1/2

S/081/60/000/017/005/016  
A006/A001

The Effect of the Chemical Composition, pH of the Synthesis Medium and the Nature of Initial Solis on the Activity of Alumo-Silicate Catalysts

processing with water vapor. After processing with H<sub>2</sub>O vapor, the activity of all catalysts drops but their specific activity increases. The specific activity of catalysts of series I is higher than that of catalysts of series II. It is concluded that at a corresponding chemical composition of the initial solutions, pH of the formation medium plays a decisive part in the formation of active centers. ✓

V. Vasserberg

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2



ZUL'FUGAROV, Z.G.; SMIRNOVA, V.Ye.

Relationship between the activity and thermal effects of  
aluminosilicate catalysts. Azerb. khim.zhur. no.4:71-82  
'59. (MIRA 14:9)

(Aluminosilicates)

ZUL'FUGAROV, Z.G.

Chemical composition, porous structure and activity of Azerbaijani  
bentonite clays. Trudy Inst.khim.AN Azerb.SSR 17:9-26 '59.  
(MIRA 13:4)

1. Institut khimii AN AzerSSR.  
(Bentonite)

S/121/60/000/018/002/009  
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 9, p. 65, # 72595

AUTHORS: Guseynova, Z. A., Topchiyeva, K. V., Zul'fugarov, Z. G.

TITLE: The Effect of Activating Cations on the Porosity of the Structure  
and Activity of Metal-Silicate Catalysts

PERIODICAL: Azerb. khim. zh., 1959, No. 6, pp. 47-55 (Azerb., Russian summary)

TEXT: On the example of Mn-, Zn-, Cu-, and Sr-silicate catalysts it is shown that more active contacts with larger specific surfaces are obtained when the indicated cations of basic metal-silicate compounds are partially substituted by cations of activating Al salts. The introduction of a Mg activator cation into the composition of the catalyst causes a widening of the pore diameter. Then the activity changes only slightly. Benzines formed on the catalysts activated with an Al cation, are more aromatized and contain less non-saturated hydrocarbons than benzines formed on initial catalysts and on catalysts activated with Mg cations.

From the author's summary.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

ZUL'FUGAROV, Z.G.

Nature of the activity of aluminosilicate catalysts used in the refining and cracking of petroleum products [in Azerbaijani with summary in Russian]. Azerb.neft.khoz. 38 no.12:31-34 D'59.  
(MIRA 13:10)

(Aluminum silicates) (Petroleum--Refining)

ZUL'FUGAROV, Z.G.; RASULOVA, S.M.; SHIRINOVA, E.B.

Cracking capacities of catalysts prepared from gilyabi (bentonites)  
of Azerbaijan. Trudy Inst.khim. AN Azerb.SSR 18:5-23 '60.

(MIRA 14:9)

(Azerbaijan--Gilyabi) (Catalysts)

S/081/61/000/010/002/029  
B117/B207

AUTHORS: Zulfugarov, Z. H., Husejnova, Z. E., Elimerdanov, H. I.  
TITLE: Study of the activity of oxide catalysts in the transformation reaction from gas condensate into unsaturated hydrocarbons  
PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1961, 71, abstract 10B512 (10B512). ("Azerb. khim. zh.", no. 4, 1960, 75-82)

TEXT: A method was studied for producing active oxide catalysts to transform the broad and the small ( $70^{\circ}$ - $140^{\circ}$ C) fraction of the gas condensate into gaseous unsaturated hydrocarbons. The activities of Mn-, Zn-, Cu silicate and Mg metal silicate, as well as Mn-, Zn-, and Cu aluminosilicate catalysts were shown to be inconsiderable and of the same order of magnitude. The activity of molybdenum catalysts prepared on the basis of  $(\text{HAlSiO}_4)_x$  hydrogels is 40-46% lower than that of the same molybdenum catalysts prepared on  $(\text{Na(K)AlSiO}_4)_x$  hydrogel basis. A profounder sub-

Card 1/2

Study of the activity of oxide...

S/081/61/000/010/002/029  
B117/B207

stitution of hydrogen ions in the aluminosilicate composition by K(Na) ions contributes to a certain increase in the yield of unsaturated hydrocarbons. The Mo-, K(Na) aluminosilicates are the most active catalysts. This type of catalyst secures a yield of unsaturated hydrocarbons amounting to 29% by weight of the initial substance, among them 11.3% ethylene, 15.9% propylene, and 1.8% butylene. [Abstracter's note: Complete translation.]

Card 2/2

ZUL'FUGAROVA, L.Sh.; MURADOVA, S.A.; SHIRINOVA, E.B.; AGDAMSKIY, T.A.;  
SMIRNOVA, V.Ye.; VEZIROVA, V.R.; ZUL'FUGAROV, Z.G.

Effect of the conditions of polymerization and of the porous  
structure on the activity of chromium-aluminum-magnesium  
silicate catalysts. Azerb.khim.zhur. no.5:87-90 '61.

(MIRA 15:5)

(Polymerization) (Porosity) (Catalysts)



5 1190

24449  
S/081/61/000/006/015/015  
B101/B201

AUTHORS:

Zul'fugarov, Z. G., Zul'fugarova, L. Sh., Muradova, S. A.,  
Shirinova, E. B., Agdamskiy, T. A., Aliyev, A. S.

TITLE:

Study of the activity of chromium aluminum magnesium  
silicate catalysts in the polymerization reaction of  
ethylene to polyethylene

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 6, 1961, 711-712,  
abstract 6P87 (6R87) ("Azerb. khim. zh.", 1960, no. 2,  
107-115)

TEXT: A study has been made of new types of chromium aluminum magnesium  
silicate catalysts (Cat) in the polymerization of ethylene to polyethylene,  
and of the activity of Cat as dependent upon the method of their introduc-  
tion into the chromium oxide. The activity of Cat has been shown essen-  
tially to depend on the method of synthesis, the chemical composition of  
the carriers having no appreciable effect upon such activity. The optimum  
ratio of  $\text{Cr}^{6+}$  and  $\text{Cr}^{3+}$  oxides in the chromium metasilicate catalysts  
concerned has been found to be 40-55 : 45-60; the maximum polymer yield per

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Study of the activity of chromium...

S/081/61/000/006/015/015  
B101/B201

g of Cat has been 92 and 114 g, respectively. No relationship has been observed between the catalytic activity of Cat and their thermograms, their porosity, specific pore volume, and apparent density. All the polymers obtained have been found to have a highly crystalline structure. The authors assumed the active part of chromium catalysts to consist of salts of chromous acid or acid salts of chromic acid. [Abstracter's note: Complete translation.]

Card 2/2

ZUL'FUGAROV, Z.G.

Theory of aluminosilicate catalysis. Trudy Inst.khim.AN Azerb.  
SSR 19:49-60 '61. (MIRA 14:10)  
(Aluminosilicates)

GUSEYNOVA, Z.A.; ZUL'FUGAROV, Z.G.

Relationship between the activity and porous structure of  
magnesium silicate and aliminomagnesium silicate catalysts  
[in Azerbaijani with summary in Russian]. Azerb. khim. zhur.  
no.3:71-82 '61. (MIRA 14:11)

(Catalysts)